The Power of PowerEdge.™

Use this guide to give your customers more power to control their IT.

Now with Intel® Xeon® quad-core processors.

POWEREDGE PROMISE
IT At Your Command:
Business-ready solutions that
help organizations gain ground.

CONQUER COMPLEXITY
Customers can win the operations battle with servers that are easier to buy, deploy, manage and maintain.

- *Leading systems management software and tools.*
- *Innovative hardware features.*
- *Industry-leading hardware, software and image commonality.*
- *Comprehensive service and support options.*

SECURE THE RIGHT SOLUTION
Customers get to partner with the experts to match business-ready technologies with their unique needs.

- *Validated, proven solutions that can be counted on.*
- *Standards based, relevant technologies, services and partnerships.*
- *The right server solution matched and customized for the customer.*
- *Choice in server platforms and features to meet unique needs.*

MAXIMIZE RESOURCES
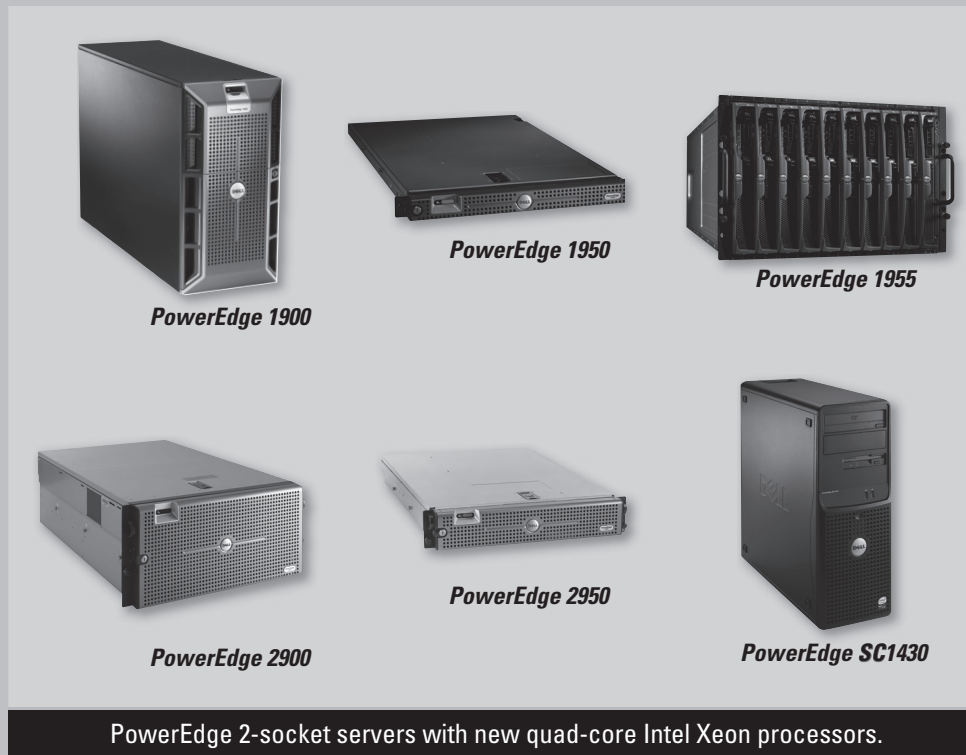*Customers get more performance for their money—now and over the life of their servers.*

- *Industry-leading price/performance and performance/watt.*
- *Reduced management and maintenance costs so customers can focus on growing their business.*
- *Technologies and solutions to maximize resources and make the most of datacenter performance.*
- *Custom-configured enterprise solutions allow customers to pay for only what's needed.*

Even More In Control.

Introducing the new PowerEdge 2-socket servers with quad-core Intel® Xeon® processors.

WHAT'S NEW
Six 2-socket PowerEdge servers with Intel's latest quad-core technology. With unparalleled performance gains, these servers provide a new level of server consolidation and a new definition of IT under control.
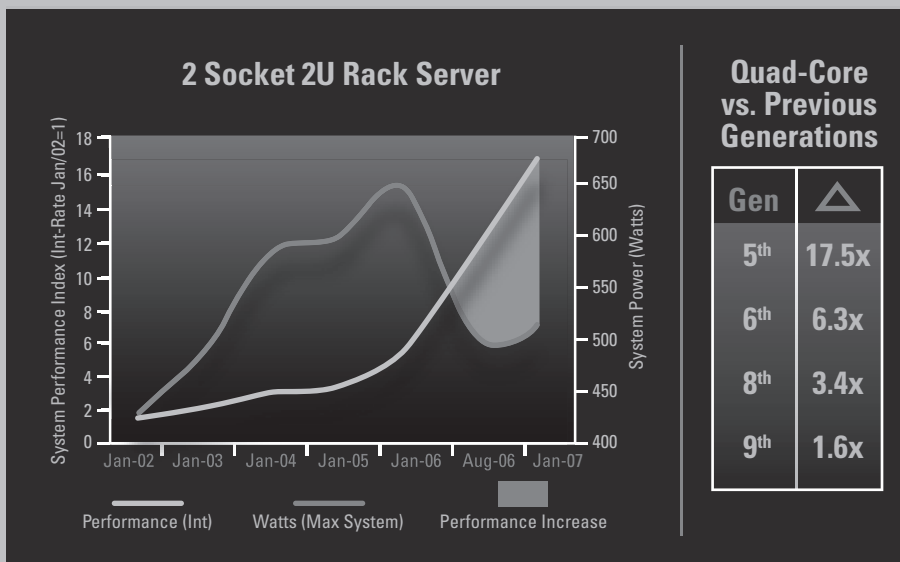
PowerEdge 1900

PowerEdge 1950

PowerEdge 1955

PowerEdge 2900

PowerEdge 2950

PowerEdge SC1430

PowerEdge 2-socket servers with new quad-core Intel Xeon processors.

WHY DELL?
These quad-core PowerEdge servers offer the right services, products and tools, all working together to put IT at customers' command.

- ***Dell PowerEdge Servers with new quad-core Intel Xeon processors*** *deliver up to 63% greater performance over the latest dual-core processors.*

- ***9G hardware consistency and software commonality*** *helps simplify operations, letting organizations focus IT resources on projects that add to the bottom line rather than day-to-day server management.*

- ***Dell Systems Management*** *offers a complete suite of hardware management tools that integrate with leading systems and software management solutions, giving organizations the flexibility to simplify and take control of their infrastructure on their terms.*

- ***Dell Professional Services*** *can help effectively assess, design and implement the customized IT solution that's ideal for individual organizations.*

GROWING BUSINESSES, NOT OVERGROWING DATACENTERS.
Striking the right balance of power, price and performance has never been more important for businesses—or more possible. One new 2-socket quad-core PowerEdge server can easily handle the work it used to take multiple older servers to accomplish. Their enormous performance increases (see chart below) make them an ideal option consolidating servers to reduce sprawl and enhance system management for greater control of service levels, higher agility and a lower total cost of ownership.

2 Socket 2U Rack Server

Performance (Int) — Watts (Max System) — Performance Increase

Quad-Core vs. Previous Generations

Gen	△
5th	17.5x
6th	6.3x
8th	3.4x
9th	1.6x

Top 10 reasons customers consolidate

1. Improve system availability
2. Ease of management
3. Improve disaster recovery
4. Optimize system performance
5. Improve security
6. Reduce spending on hardware
7. Reduce spending on infrastructure
8. Operating platform standardization
9. Reduce spending on software
10. Reduce spending on applications

Source: IDC: Server & Storage Consolidation, March 2004

Dell Systems Consolidation Services can address Logical, Physical, Workload and Application consolidation to simplify management, improve utilization and cost-effectively scale infrastructures. Dell even conducts an insightful business analysis to develop an estimate of what return on investment consolidation will deliver.

Server Consolidation ROI Advantages:

- *Reduced hard costs: fewer servers, software licenses, server locations and simplified server administration reduce overall IT costs.*

- *Improved control and manageability of servers: standardization helps increase server environment manageability, availability and security.*

- *Improved service levels and efficiency of operations: increased system reliability and performance allows IT resources to focus on higher value tasks.*

Check the Enterprise Solutions Navigator at http://pc.us.dell.com/solutions for identifying, qualifying and closing server migration and consolidation deals.

Server Decision Guide

The PowerEdge family covers the majority of enterprise IT needs, from basic applications to specialized computing. This chart can guide your discussion when helping customers choose the server that will give them the right performance and control for their specific needs.

TO USE THIS CHART:
1. Begin discussion with PowerEdge 2950.
2. Determine if customer needs more A) DENSITY, B) EXPANDABILITY or C) SPECIALIZATION and move the discussion in the corresponding direction.
3. Continue following the flow of discussion in the direction of the customer's interests until reaching their best server option.

Basic	**Mainstream Datacenter**	**Specialized Computing**
File/Print, Standalone Applications, Email, Web	Oracle, Exchange, Virtualization, HA Cluster, SQL, etc.	HPCC, Back-end Datacenter

APPLICATION COMPLEXITY →

EXPANDABILITY | DENSITY

PE 1955

ultra density

more basic

PE 860

PE 1950

more density

PE SC1435

2-socket

more specialization

4-socket

more basic

PE SC440   PE SC1430   PE 840

PE 2950

OR

PE 6850   PE 6950

more expandability

more basic

more expandability

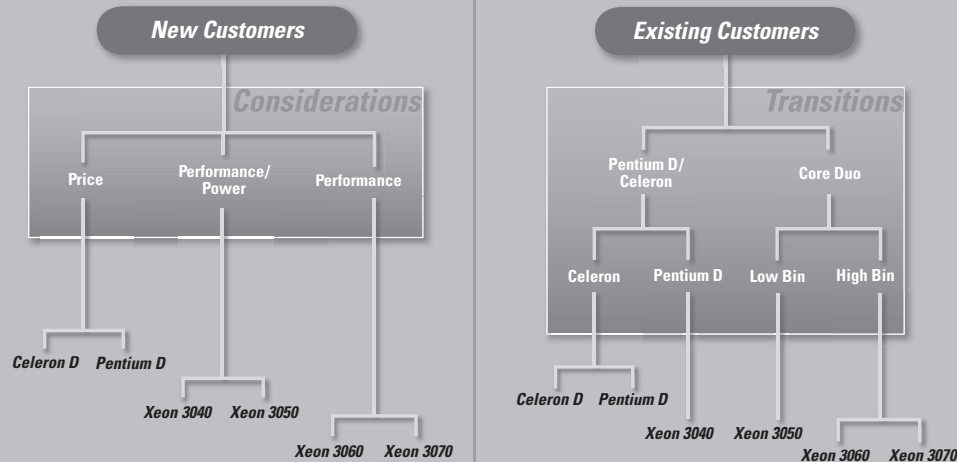PE 1900   PE 2900   PE 6800
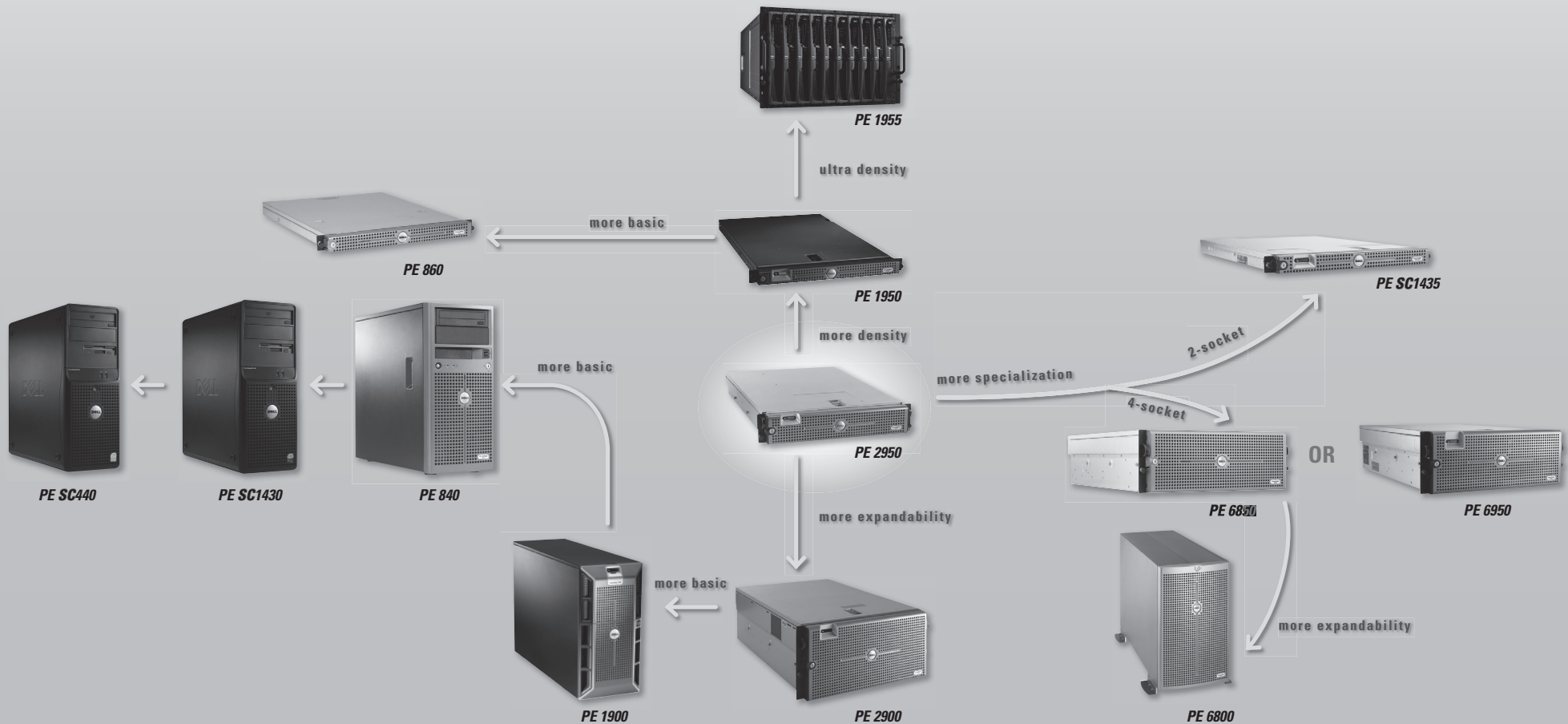
Processor Decision Guides

Use these charts to determine customer's specific processor needs.
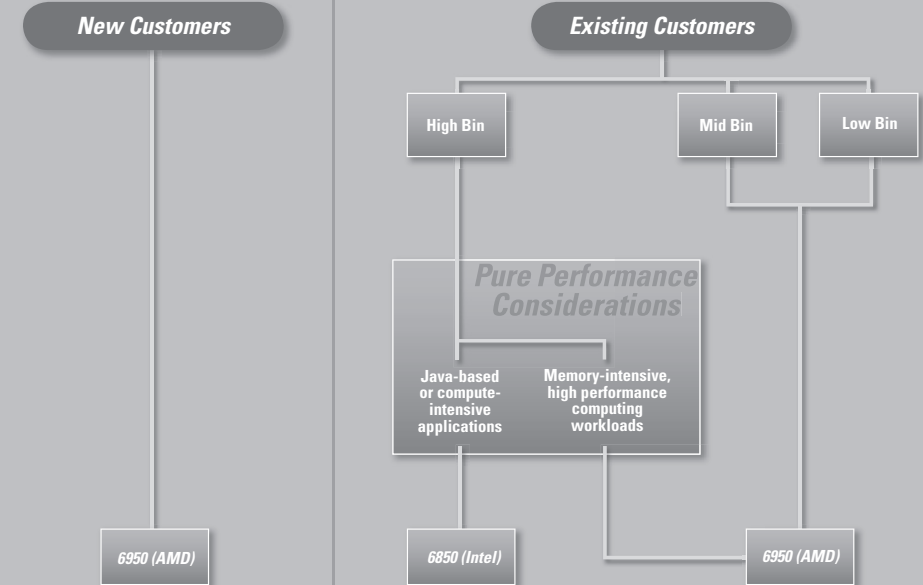*(Note: The term "bin" refers to the industry term to identify different levels of processor frequency.)*

TO USE THESE CHARTS:
1. Begin at either NEW CUSTOMER or EXISTING CUSTOMER.
2. Determine existing customer's transition goals and new customer's most important considerations and move the discussion in the corresponding direction.
3. Continue moving in the direction of the customer's interests until reaching their best server option.

1 SOCKET TRANSITION GUIDANCE

New Customers

Considerations

Price — Performance/Power — Performance

Celeron D — Pentium D

Xeon 3040 — Xeon 3050

Xeon 3060 — Xeon 3070

Existing Customers

Transitions

Pentium D/Celeron — Core Duo

Celeron — Pentium D — Low Bin — High Bin

Celeron D — Pentium D

Xeon 3040 — Xeon 3050

Xeon 3060 — Xeon 3070

2 SOCKET TRANSITION GUIDANCE

New Customers

Considerations

Price — Performance/Power — Performance

5000 Low Bin — 5100 Low Bin

5300 @ 1066 — 5148 Low Volt / 5100 Low Bin

5300 @ 1066 — 5300 @ 1333

Existing Customers

Transitions

Xeon 5000 — Xeon 5100

Low Bin — High Bin — Low Bin — High Bin

5000 Low Bin — 5100 Low Bin

5300 @ 1066 — 5100 Low Bin

5300 @ 1066 — 5300 @ 1333

4 SOCKET TRANSITION GUIDANCE

New Customers

6950 (AMD)

Existing Customers

High Bin — Mid Bin — Low Bin

Pure Performance Considerations

Java-based or compute-intensive applications — Memory-intensive, high performance computing workloads

6850 (Intel) — 6950 (AMD)

Other Considerations

	PowerEdge 6850	PowerEdge 6950
9th generation features		•
Lower power consumption		•
Quad-core upgrade path		•
110V-240V power flexibility		•
SCSI internal HDD	•	
External SCSI for tape	•	
PCIx requirements	•	